

Pediatric Quality Indicator 12 (PDI 12) Central Venous Catheter-Related Blood Stream Infection Rate

July 2022

Hospital-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

qualityindicators.ahrq.gov**DESCRIPTION**

Hospital discharges with central venous catheter-related bloodstream infections (secondary diagnosis) per 1,000 medical and surgical discharges for patients ages 17 years and younger. Excludes discharges with a principal diagnosis of a central venous catheter-related bloodstream infection, or a secondary diagnosis of a central venous catheter-related bloodstream infection present-on-admission; discharges of normal newborns; discharges of neonates with a birth weight of less than 500 grams, discharges with length-of-stay less than two (2) days; and obstetric discharges.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

NUMERATOR

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-10-CM diagnosis code for central venous catheter-related bloodstream infection (**IDTMC3D***).

Note: The Numerator definition is identical for Overall, High, Intermediate, and Low Risk Categories.

DENOMINATOR OVERALL

Surgical (**Appendix C: SURGI2R**) or medical (**Appendix E: MEDIC2R**) discharges, for patients ages 17 years and younger. Surgical and medical discharges are defined by specific MS-DRG codes.

[Appendix C - Surgical MS-DRGs](#)

[Appendix E - Medical MS-DRGs](#)

DENOMINATOR EXCLUSIONS

Exclude discharges:

- with a principal ICD-10-CM diagnosis code, or secondary ICD-10-CM diagnosis code present on admission, for central venous catheter-related bloodstream infection (**IDTMC3D***).
- normal newborns (**Appendix I**)
- neonates (**Appendix I**) with birth weight less than 500 grams (Birth Weight Category 1) (**Appendix L**)
- with length of stay less than two (2) days
- MDC 14 (pregnancy, childbirth, and puerperium)
- with an ungroupable DRG (DRG=999)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)
- with missing MDC (MDC=missing) when the user indicates that MDC is provided

Note: The Denominator Exclusions are identical for Overall, High, Intermediate and Low Risk Categories.

[Appendix I - Definitions of Neonate, Newborn, Normal Newborn, and Outborn](#)
[Appendix L - Low Birth Weight Categories](#)

For risk adjustments, discharges are grouped by Risk Category based on highest severity diagnosis or procedure. Risk Categories are mutually exclusive. A discharge can only be high, intermediate, or low risk. For risk category definitions, see Pediatric Quality Indicators (PDI) Parameter Estimates, v2022 on the AHRQ QI website.

* See below for code list

Central venous catheter-related blood stream infection diagnosis code: (IDTMC3D)

T80211A Bloodstream infection due to central
 venous catheter, initial encounter

Cystic fibrosis diagnosis codes: (ACSCYFD)

E840	Cystic fibrosis with pulmonary manifestations	E848	Cystic fibrosis with Other manifestations
E8411	Meconium ileus in cystic fibrosis	E849	Cystic fibrosis, Unspecified
E8419	Cystic fibrosis with Other intestinal manifestations		

Hemophilia diagnosis codes: (HEMOPHD)

D66	Hereditary factor viii deficiency	D681	Hereditary factor xi deficiency
D67	Hereditary factor ix deficiency	D682	Hereditary deficiency of Other clotting factors
D680	Von willebrand's disease		